

Dear All:

The "Let's Do This Right" articls is about the best single, simple, and short piece I've read about this topic in a long while. I think we all know that in theory the Marcellus play can work (emphasis on "theory" and "can"). Whether it will is the issue, and what is necessary to ensure a true benefit/cost to society as well as the industry. The drilling operation is an engineered system subject to the vagaries of such systems; virtually no attempt to create and operate a large-scale, "fool-proof" engineered system has ever occured (if you are aware of any, please let us know so we can learn from them); even highly monitored space telescopes, space probes, and launches from Cape Canaveral have defected. It is, therefore, reasonable to expect problems with extracting natural gas from the Marcellus shale, operations reaching a mile beneath the surface through non-uniform land masses subject to movement (eg., subsidence) and other stresses and strains, even under careful and thorough monitoring (which we appear unable to afford). And that in addition to surface operations that lead to erosion and other unanticipated (?: they appear so common as to question whether they are "un"anticipated) consequences. An old axiom: only that which is appropriately supervised gets done right (rule nbr 6?).

I like to think we can do this right; however, I wonder whether we will.

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Ex. 6 - Personal Privacy

From: Ex. 6 - Personal Privacy
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Sent: Sunday, January 08, 2012 4:12 AM

To: Angela McFadden; Athey Lutz; Bill Austin; Bill Byrne; Bill Goodwin; Bill Schuller; Wyant, William; Bob Ventorini; Bob Wells Zinka-Ent Inc; Brent Wiles; Bryan Moore; Charlie Byrer; Chris Hardie; Constance Miller; Cookie Coombs GMCVB; Lefevre, Craig; Curtis Meeder; Cynthia Loomis; Daniel Soeder; Dave Bean; Dave Bott; Dave Johnson; Dave Milne; David Wellman; Deb Fulton; Don Garvin; Don Spencer; Dorothy Bassett; Ed Wade; Emily Perrotta; Halloran, Erin; Frank Borsuk US EPA; Greg Bellich; Jason Walls; Jerald Fletcher; Jerod Harman; Jim Ammer; Jim Evans; Jim Sconyers; Joe Lapcevic; John & Ellen Britton; John Duarte; John Duda; John Eleyette; John Flynn; John Forren; John M. Angiulli MEPCO; John M. Love; John Snyder; John Yesenosky; Jon Capacasa; Jonathan Pachter CONSOL ENERGY; Joseph Swearman; Larry Merrill; Leroy Stanley; Lisa Snider; Louis P. Bonasso; Louis Reynolds; Mark McCurdy; Mark Nelson; Melissa O'Neal; Mike Manypenny; Mike Withers; Patrick Campbell; Paul B. Brown; Paul Hamrick; Peggy Sue Miller; Richard Collier; Richard Walters; Robbie Matesic; Robert Sheedy; Ryan Dean; Scott The Missing Link Link; Skip Pratt; Steve Garvin; Tom Mroz; Werner Loehlein; William Richardson

Subject: Fw: DAILY UPDATE 8 January 2012. News of interest to Mon river watershed denizens.

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Ex. 6 - Personal Privacy

Sent: Sunday, January 08, 2012 4:10 AM

Subject: DAILY UPDATE 8 January 2012. News of interest to Mon river watershed denizens.

DUNKARD CREEK-8JanY2K12

NOTE! Tomorrow's DAILY UPDATE may be bit late. Have Steelers game watch here this evening.

DOMINION POST Sunday 8 January 2012:

OPINION page 1-D

Let's do this right

Natural gas: Cheap, clean and perilous

POLITICAL LEADERS

from both parties argue that natural gas could save our economy, the environment and promote our national security. Is this so? Or is it just a dream?

It turns out that the way one develops natural gas will determine whether it is a serious help to our energy and climate problems, or a dangerous extension of bad habits.

On the face of it, natural gas looks terrific. The United States — and other countries — have abundant domestic supplies. The cost, per delivered unit of energy, is about a third of that of oil. It is cheap and fast to build power plants fueled by natural gas. And when burned, it emits only half as much carbon as coal. So what's not to like?

Well, things are not so simple. Under the best conditions, we may enjoy those benefits, but under more adverse conditions, gas can be a worse generator of greenhouse gas than coal, can wreak massive local environmental destruction and can undermine energy efficiency and renewable energy. And without a strong set of policies to guide natural gas development, the worst case is far more likely.

Start with climate change: Generating a kilowatt-hour's worth of electricity with a natural gas turbine emits only about half as much CO2 as generating the same electricity at a coal plant. Half-off is good. But unburned natural gas turns out to be a very powerful greenhouse gas: One molecule of leaked gas contributes as much to global warming as 25 molecules of burned gas. That means if the system for the exploration, extraction, compression, piping and burning of natural gas leaks by even 2.5 percent, it's as dirty as coal.

So, how much does the gas system leak? No one knows: Estimates range from 1.5 percent to as high as 8 percent. Even near the low end of that range, gas can be as bad as coal. And whatever the leaks in the U.S. system, it is likely to be far worse in, say, Russia.

This gives us rule one for smart natural gas development: No leaks in the system. We have to know, for certain, that the whole process is tight, and stays that way.

There's more we need to ensure, because of the economics of energy systems, and how that drives the choice of options in the electricity system. It starts with a basic economic truth: Once a coal-fired plant is built, it is incredibly cheap to run. Once built, our coal plants run forever. The median age of a coal plant in the United States is 44 years, and a third of them were built during or before the Eisenhower administration.

What this means is that when we add natural gas power plants to the electricity grid, it does not, through pure market forces displace coal. Instead, it displaces alternatives, which often means new, renewable energy. If half-CO2 gas is displacing zero-CO2 renewables, well, that's no victory. So, rule two: Use gas to shut down old coal. Make this an explicit condition.

The final three rules have to do with local environmental conditions. We have all seen the films of people's tap water catching fire after a nearby gas well was put in. That's because of lousy construction quality: Bad well casings allow gas to leak into the aquifer. They can also allow in fluids from hydraulic fracturing (fracking) when that method is used to tap a gas well. Rule three: Strong standards for wells, with effective monitoring and enforcement.

Then there is the damage that wells can do to the gas site. Many wells extract brackish water and other nasty byproducts, like benzene and toluene from deep underground, and spill the mixture onto nearby farmlands — literally salting the earth. The water is a large-scale byproduct of gas extraction, and, at the request of then-Vice President Dick Cheney's energy task force, it is exempted from any regulations under the Clean Water Act. Rule four: Don't allow these toxic streams to poison the land.

Finally, choosing where and how to drill is important. Many of the natural gas technologies entail massive surface disturbance. Roads, drilling rigs, compressors, pipelines, drainage ponds and large amounts of heavy equipment are required for each well. And wells are densely placed, sometimes one for every 10 acres. This means that many natural gas fields are industrial wastelands. After drilling, ranches in the West have been left unsuitable even for cows, never mind wildlife.

We need to zone the gas development so that it is kept out of ecologically important areas, and we need strong drilling, operating and reclamation standards so that gas doesn't become a scorched-earth energy strategy.

Gas can do a great deal for our energy future. But if it is mishandled, it can instead serve up great problems — in land destruction, water quality and climate change. Five rules get it right: Don't allow leaky systems; use gas to phase out coal; have sound well drilling and casing standards; don't pollute the landscape with brackish water; and drill only where it is sensible. Let's do this right.

HAL HARVEY is the founder of the ClimateWorks Foundation. He has served on presidential commissions under the first President Bush and President Clinton, and he serves on the advisory board for the U.S. Department of Energy. He wrote this for the Los Angeles Times.

Drilling numbers do not add up

Sunday, January 08, 2012

By Sean D. Hamill, Pittsburgh Post-Gazette

One of the most popular features of the Pittsburgh Post-Gazette's Pipeline page that focuses on Marcellus Shale coverage is an interactive map.

We started by downloading data on every Marcellus Shale well permit from the Pennsylvania Department of Environmental Protection's website and mapping it so readers could find out where wells might be going in.

Later we added data about fines levied on drillers, and on which wells were eventually drilled.

Then we decided to include the state's production data, but we ran into an issue that has had ripple effects from DEP, to drillers, to environmental organizations, to the state Legislature.

When PG Web content producer Laura Schneiderman downloaded DEP's production data, she discovered it says there are 495 more wells producing gas, or ready to produce gas, than DEP has recorded as ever being drilled, and 182 of those wells don't even show up on the state's Marcellus Shale permit list.

These aren't just factoids that only a techno geek could get excited about, either.

The data discrepancies and other significant problems with DEP's Marcellus Shale data have caused problems for information companies, environmental organizations and drillers that rely on it to analyze the industry. The discrepancies have caused headaches for Senate and House staff who have been trying to make accurate projections about how much revenue an impact fee on wells might generate for local governments, and where. "There has been a frustration over the last six or seven months that DEP does not have information that is always beyond reproach," said Drew Crompton, chief of staff to Senate President Pro Tem Joe Scarnati, R-Jefferson.

'Significant error rate'

Mr. Crompton, who has tried to make sense of DEP's data as the Senate began crafting an impact fee bill last year, said the information problems are so befuddling that it helped delay approval of the bill. Legislators simply haven't been able to get accurate projections on the financial impact.

"Every time I think I've got something locked down, it changes," said Mr. Crompton, who discovered the same data issues that the Post-Gazette did.

Given that the state says that since 2007 there have been about 4,200 wells drilled, 495 wells is about a 12 percent error rate on the wells drilled data that is so widely quoted by politicians, environmentalists and the industry alike.

"That's a significant error rate," said Bruce Stauffer, vice president of geographIT, a Lancaster-based company that provides geographic information services to industry and governments.

His company also ran into the same problem with DEP's data when last year it began putting together Marcellus monitor, the company's interactive mapping tool that it sells to companies and governments.

"It's obvious DEP's data isn't clear and accurate," he said. "Why? I don't know. And I don't think they have the answers."

When the Post-Gazette first asked DEP to explain the discrepancy, the department would not take questions about why there was such a large error.

Because the production data is "reported to DEP by the operators," spokesman Kevin Sunday wrote in an email response to questions in late October, the Post-Gazette should "rely on the production data as to the 'Marcellus' or 'non-Marcellus' classification of a well."

Both industry and environmentalists said that relying only on industry-provided data poses problems.

"You want to be able to rely on state data as the most accurate," said Davitt Woodwell, vice president of the Pennsylvania Environmental Council, which has been studying the Marcellus Shale industry and found data problems itself. "It makes for a better understanding of issues if you have a lot of good data from the state -- the good and the bad."

Range Resources, the largest Marcellus driller in southwest Pennsylvania, has staff go over all the available state data and draws its own conclusions about what its competitors are doing, rather than rely on Pennsylvania DEP's numbers, said Carl Carlson, Range's director of government affairs and a geologist by training.

"In a perfect world" drillers could rely on the state information, said Mr. Carlson, whose company had 104 wells on the list of 495 wells the Post-Gazette identified. "But we have our own internal list our guys go over. Our list is different than the state lists and we think we have a pretty good handle on how many wells have been drilled."

Part of Range's distrust of the state data comes from obvious examples, he said.

Just by comparing a well's listing on the state DEP's wells drilled list (called a "spud report") to a listing on the Pennsylvania Department of Conservation and Natural Resource's Internet Record Imaging System he said: "I've noticed numerous errors about whether a well is horizontal or vertical."

"If you look up a well on IRIS you see a well clearly listed as horizontal, but it's listed as vertical on the spud

list," he said.

That conflict -- between vertical and horizontal Marcellus wells -- also posed problems for legislative staffers, who were trying to figure out if impact fees for vertical wells should be cheaper or the same as for horizontal wells

But we still haven't been able to get an accurate count of vertical Marcellus wells," Mr. Crompton said. Since October, six drilling companies, which collectively drilled the overwhelming majority of the 495 wells on the list, all confirmed to the Post-Gazette that their wells on the list were drilled into the Marcellus.

While the drilling companies couldn't figure out why most of the wells didn't register by the state as wells drilled, several said that some of the 182 wells that weren't on the permit list appeared to have been vertical Marcellus wells.

Last month, DEP agreed to check the list and it confirmed that those 182 wells do appear to be vertical Marcellus wells that simply were never recorded properly as Marcellus -- most of which are horizontally drilled wells.

The Post-Gazette also ran into a data problem the state only recently took notice of that made checking either the wells drilled or production data impossible.

The most accurate report about the intentions of any well is the well completion report, which is supposed to be filed within 30 days after a well has been completed. It not only says a well is completed, but indicates the depth of the well, as well as how far it went vertically, when it hit the Marcellus Shale rock, how far out the well was perforated, and other information.

DCNR geologists are supposed to receive a completion report for every well drilled in the state from DEP, analyze it for accuracy, and then tabulate the data and scan in the completion report itself and make it available on its Internet Record Imaging System, a site that requires a fee to use.

However, drillers routinely fail to file the reports with DEP. As of December, DCNR had only received 1,222 well completion reports since 2007, compared to about 4,700 wells that apparently have been drilled.

But starting in March last year, for the first time, DEP began fining drillers for failure to file well completion reports on time. At least 11 drillers have been fined up to \$5,000 for the violations.

The data problems span both the Ed Rendell and Tom Corbett administrations.

Data collection and reporting errors were "something identified through the transition period in the first few months" of Mr. Corbett's term as governor in early 2011, Mr. Sunday said. "And it's one we hope to clear up and get more consistent at."

"We acknowledge that there are issues in both how the data is presented and how it's coming in," he said. He said the problem with the wells drilled data appears to be because of the way that information is collected. In some cases it is called in or emailed in by the companies, but in other cases it is called in or entered by state inspectors who visit the sites.

"So, with so many ways of reporting, we have a risk of error," he said.

DEP also has seen confusion about how to categorize vertical Marcellus wells, since most Marcellus wells are horizontal and "we're trying to clear that data up, too," Mr. Sunday said.

John Hanger, DEP secretary the last two years of Mr. Rendell's administration, said he's not surprised that the state is finding problems "with such a high number of reports coming in."

"Record-keeping issues are important, and I'm glad the department is taking it seriously. It's important for the community and for the industry to have accurate information," he said.

Ultimately, the problems may be rectified because of the impact fees, Mr. Crompton said, because all of the House and Senate bills on the issue include extensive provisions for auditing and fact-checking data.

If the impact fee bill passes "there will be quite the mechanisms in place to know where all the wells are and what's happening with them," he said.

Sean D. Hamill: shamill: shamill@post-gazette.com or 412-263-2579.

First published on January 8, 2012 at 12:00 am

Oglebay Drill Site Selected

January 8, 2012

By CASEY JUNKINS Staff Writer. The Intelligencer / Wheeling News-Register

WHEELING - Chesapeake Energy is preparing to horizontally drill for gas from under Oglebay Park, which means that city

taxpayers and the Wheeling Park Commission may soon begin drawing natural gas royalties.

Chesapeake has formed a 543-acre drilling unit that the company refers to as the "Timmy Minch" pad. This is because the well is set to be drilled on property in the Minch name that is located near Oglebay's land.

The natural gas trapped under Oglebay Park will then be accessed via horizontal drilling, a technique that allows drillers to access gas in a pooled unit from a central well site. That means no drilling equipment will be located on the surface of Oglebay Park's property.

Photo by Casey Junkins

Natural gas abstractors still flood the second floor of the City-County Building in Wheeling to examine property records at the Ohio County Clerk's Office.

"We anticipate to drill this site in the first half of this year, but drilling schedules are subject to change," said Stacey Brodak, Chesapeake's director of corporate development. "The pad site is still under construction at this time."

According to documents on file in the Ohio County Clerk's Office, Chesapeake's drilling pad for the Minch well consists of 543 acres pooled together from 27 separate leases held by the company in the Oglebay Park area. The majority of this acreage - 322.5 acres - is in the name of the Wheeling Park Commission and the city of Wheeling.

In late 2009, Wheeling City Council voted 6-1, with Councilman Robert "Herk" Henry in opposition, to allow Chesapeake to draw gas from the Oglebay property. The park commission - a separate body tasked with overseeing Oglebay and Wheeling Park - and the city are set to evenly split the production royalties for any gas produced from the Oglebay land. The commission and city each earned \$386,629 in lease payments from Chesapeake as part of the drilling contract. Chesapeake also paid the park commission \$100,133 to lease property at Wheeling Park. Any of the drilling royalties for

action at Wheeling Park would go toward facility improvements.

Chesapeake's original drilling plans called for the closure of the Oglebay Stables, with the company's drilling pad to be established nearby at a point between W.Va. 88 and GC&P Road. The Oklahoma City-based company sought permission from the West Virginia Department of Environmental Protection to begin this process in May 2010.

However, park commissioners quickly objected to the project by questioning plans for water usage and transportation and the disposal of fracking fluid, among several other concerns. The DEP then sent these plans back to Chesapeake.

The DEP has now issued drilling permits for Chesapeake to complete the Minch pad. Park commission attorney James Gardill - who could not be reached for comment for this story - previously said commissioners wanted to see the gas drained from the Marcellus Shale formation that lies more than a mile under the ground, but without any wells being drilled on the Oglebay surface. The Minch pad plan would accomplish this through horizontal drilling.

"If there are no geological, operational or other setbacks, the Wheeling Park Commission properties and the Ohio County Commission properties can anticipate receiving royalties based upon their proportionate share of the acreage contributed to the pooled units, which are subject to change," said Brodak.

The Ohio County Commission's contract of which Brodak spoke yielded the county \$3,600 per acre in lease payments, with production royalties of 18 percent. These terms are for drilling at The Highlands, the Ohio County Airport and the Ohio County Farm.

County records also show that several acres in the name of the Oglebay Foundation will see gas drained via Chesapeake's nearby "Edward Nichols" pad.

Exxon Gets 13,200 Acres

January 8, 2012

By CASEY JUNKINS Staff Writer, The Intelligencer / Wheeling News-Register

WOODSFIELD - Exxon Mobil has acquired about 13,200 acres in leases in Monroe County as the oil and natural gas giant continues expanding its Utica Shale footprint.

Documents filed in the Monroe County Recorder's Office on Dec. 21 show that Ravenna, Ohio-based Beck Energy Corp. assigned roughly 150 individual leases to Texas-based Exxon and the company's natural gas subsidiary, XTO Energy. "XTO has a leasehold in the area and (is) in the process of evaluating this acreage to determine its value," said Jeffrey Neu, public and government affairs adviser for XTO. "We continuously evaluate and pursue potentially attractive opportunities in all regions of the United States to optimize the corporation's portfolio."

Most of the Monroe County leases were originally signed from 2001 to 2006, with the oldest dating back to 1989. The majority feature acreage in the townships of Benton, Center, Jackson, Perry and Wayne. The parcels range in size from as small as 0.24 acres to as large as 597 acres.

Exxon/XTO now holds the 25.5-acre lease signed by the Switzerland of Ohio Local Board of Education on Sept. 1, 2006; the 36.2-acre lease signed by Monroe County commissioners on July 27, 2006; the 140-acre lease of the Monroe County Airport Authority signed on April 27, 2006; and the 49 acres of Monroe County Agricultural Society leases signed on July 27, 2006.

Beck Energy recently drilled what it termed a "test well" on the south side of Interstate 70 between St. Clairsville and Morristown. Owner Raymond Beck said the Monroe County landowners should be glad to now have deals with Exxon. "We feel it is a good opportunity for the landowners because they are going to drill," he said.

Records with the Ohio Department of Natural Resources show that Beck has dozens of wells in Monroe County that are already producing oil and natural gas, though these are mostly shallow wells that yield far less oil and gas than the horizontal Marcellus and Utica Shale wells companies are drilling now.

In addition to taking over the Beck leases, files in the Belmont County Recorder's Office show XTO signed a number of

property owners to new leases in recent months. Many of these owners signed to receive lease payments of \$4,950 per acre with 19 percent payments on production royalties, including the Union Local Board of Education and Martins Ferry Board of Education.

Though he would not speculate on XTO's drilling plans for Belmont or Monroe counties - or reveal how much Exxon paid Beck for the leases - Neu said the company remains committed to producing domestic natural gas.

"Our operations support the country's economic recovery, strengthen energy security and help meet environmental goals through responsible development of clean-burning natural gas," he said.

Binghamton NY PressConnects.com:

Federal agency cancels water delivery to Dimock, Pa.

9:29 PM, Jan. 7, 2012

Written by

Michael Rubinkan

Associated Press

ALLENTOWN, Pa. -- The U.S. Environmental Protection Agency abruptly changed its mind Saturday about delivering fresh water to residents of a northeastern Pennsylvania village where residential wells were found to be tainted by a natural gas drilling operation.

Only 24 hours after promising them water, EPA officials informed residents of Dimock that a tanker truck wouldn't be coming after all. The about-face left residents furious, confused and let down -- and, once again, scrambling for water for bathing, washing dishes and flushing toilets.

Agency officials would not explain why they reneged on their promise, or say whether water would be delivered at some point.

"We are actively filling information gaps and determining next steps in Dimock. We have made no decision at this time to provide water," EPA spokeswoman Betsaida Alcantara said in an e-mail to The Associated Press.

It's not clear how many wells in the rural community of Dimock Township were affected by the drilling. The state has found that at least 18 residential water wells were polluted. Houston-based Cabot Oil & Gas Corp., which was banned in 2010 from drilling in a 9-square-mile area around the village, maintains that it is not responsible for the pollution and that the water is safe.

Eleven families who sued Cabot expected water from the EPA to arrive either Friday or Saturday.

They have been without a reliable source of water since Cabot won permission from state environmental regulators to halt deliveries more than a month ago.

The homeowners say their wells are tainted with methane gas and toxic chemicals used in hydraulic fracturing, a technique in which water, sand and chemicals are blasted deep underground to free natural gas from dense rock deposits.

Dimock resident Victoria Switzer said there have been several false promises over the years, but the most recent really stings.

"How much do the people here have to endure?" she said. "I'm very pessimistic now how these regulatory agencies are working."

It's not that she and her neighbors want a big payout. All they are asking for is clean water, with many working daily trying to get help, Switzer said.

"It's so stressful," she said. "This is just cruel and unusual punishment.'

Dimock resident Craig Sautner said an EPA staffer in Philadelphia told him Saturday the water delivery was canceled. He said the EPA staffer, on-scene coordinator Rich Fetzer, would not explain why.

"You can't be playing with people's lives like this," said Sautner, whose well was polluted in September 2008, shortly after Cabot began drilling in the area.

Sautner and the other homeowners had been relying on deliveries of bulk water paid for by antidrilling groups, but the last delivery was Monday, and some of them ran out.

After the EPA delivery fell through Saturday, the environmental group Water Defense, founded by actor Mark Ruffalo, said it would send a tanker from Washingtonville, N.Y., on Sunday to replenish the residents' supply.

Dimock has become a focal point in the national debate over the so-called fracking method, which

has allowed energy <u>companies</u> to tap previously inaccessible reservoirs of natural gas while raising concerns about its possible health and environmental consequences. The industry says the technique is safe.

Gas drilling companies have flocked in recent years to the Marcellus Shale, a massive rock formation underlying New York, Pennsylvania, Ohio and West Virginia that's believed to hold the nation's largest <u>deposit</u> of natural gas. Pennsylvania has been the center of activity, with thousands of wells drilled in the past few years.

The latest twist in the three-year-old Dimock saga left residents with plenty of questions, but no answers.

"What happened? Who had the power here? Who had the power to change their minds? Was it the governor? Was it somebody from Washington? Was it Cabot? What happened? We don't know. We're really confused," said Wendy Seymour, an organic garlic farmer.

Seymour said an EPA official in Philadelphia told her Friday that she could expect a delivery. On Saturday, another EPA official called her and "apologized for the confusion" and said EPA was still assessing the situation.

Claire Sandberg, <u>executive director</u> of Water Defense, said the EPA owed them an explanation. "It's tragic to see the EPA raise these people's hopes and then dash them, to see the EPA suggest they were beginning to accept their responsibility to protect the public, and then back out a few hours later when these people are so desperate," she said.

Staff writer Debbie Swartz contributed to this report.

URL for interesting article:

Study: Plume vapors linked to birth defects Infants born in 70-block area of Endicott had higher rates of health problems

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Spring groundbreaking eyed for riverfront park in Aspinwall

By Alex Nixon

PITTSBURGH TRIBUNE-REVIEW

Sunday, January 8, 2012

Construction could begin this spring on \$100,000 in improvements to an Aspinwall marina that a nonprofit group wants to convert into a public riverfront park.

Aspinwall Riverfront Park Inc. has asked for proposals from landscape architects and designers for transforming the 8-acre Aspinwall Marina along the Allegheny River. A second nonprofit group, Friends of the Riverfront, raised \$2.3 million and purchased the property in October.

"Aspinwall Riverfront Park property is a truly rare piece of urban property that has the potential to be a community treasure and a key link in Pittsburgh's spectacular trail system," said Susan Crookston, a principal of Allegheny Development Partners, a consultant to the project.

Crookston led efforts to raise money and buy the marina property upon learning in 2010 that UPMC St. Margaret hospital was interested in buying the land and using it for parking. Former marina owner David Kushon had put the property up for sale for \$2.5 million.

Aspinwall Riverfront Park officials have said they want to hire a design team that will develop a master plan for the space in coordination with the public and community groups. Design teams have until Jan. 18 to answer the group's request for proposals. A selection committee will review proposals and identify five finalists to interview. One design team from the group of finalists will be chosen to begin the project.

Officials expect a two-phase development project, with the first phase beginning in May and addressing "immediate needs," such as adding pathways and lighting and making the park more attractive and useful. The estimated budget for the first phase is \$100,000.

A second phase could begin in December and, with a budget of \$2 million, would include full implementation of the master plan, including renovating existing buildings and constructing new buildings, Aspinwall

Riverfront Park officials said.

They want to keep the existing marina operation and add a restaurant, coffee shop and retail space while improving green space and adding trails around the property.

Funds for the improvements would be raised from the public and foundations, said Bob Oltmanns, a spokesman for Aspinwall Riverfront Park.

Alex Nixon can be reached at anixon@tribweb.com or 412-320-7928.

Pittsburgh Tribune Review:

Ohio's Richland County plans to fight injection wells By Associated Press

Sunday, January 8, 2012

MANSFIELD, Ohio -- Officials in northern Ohio's Richland County are working to create a regional fund to fight two planned wells in the area that would be used to inject wastewater from gas drilling operations into the ground.

The Ohio Department of Natural Resources has approved permits for a Texas-based company to operate two 5,000-foot injection wells in Mansfield, about halfway between Cleveland and Columbus.

City officials are asking local governments to contribute thousands of dollars to a fund that would be used to protect residents' interests, either by opposing creation of the wells or funding research and litigation about potential side effects of the wells, such as groundwater contamination, the Mansfield News Journal reported. "I want to send a message to the whole industry -- 'Don't mess with Mansfield," city law director John Spon said.

Area officials are concerned about possible effects of the well and the process of bringing in wastewater from drilling in Pennsylvania and other states, by rail or truck.

"We fear for our county's potable water supply, in rural areas, and also for our roads," Richland County Commissioner Tim Wert said.

There's also concern about earthquakes. The Youngstown area has experienced a series of minor quakes over the past year, including one on New Year's Eve blamed on an injection well that has since been shut down. The well operator and the state are reviewing the seismic activity.

"We as a city are not anti-business. We are not anti-progress," Spon said. "We are for safety and doing things the right way."

Associated Press can be reached at or.

EPA cancels water delivery to drilling-tainted Dimock

By Associated Press

Sunday, January 8, 2012

ALLENTOWN -- The U.S. Environmental Protection Agency abruptly changed its mind on Saturday about delivering fresh water to residents of a Northeastern Pennsylvania village where residential wells were found to be tainted by a natural gas drilling operation.

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or fracking, a technique in which water, sand and chemicals are blasted deep underground to free natural gas from dense rock deposits.

Dimock resident Craig Sautner said an EPA staffer in Philadelphia told him yesterday that the water delivery was canceled. He said the EPA staffer, on-scene coordinator Rich Fetzer, would not explain why.

"You can't be playing with people's lives like this," said Sautner, whose well was polluted in September 2008, shortly after Cabot began drilling in the area.

Sautner and the other homeowners had been relying on deliveries of bulk water paid for by anti-drilling groups, but the last delivery was Monday, and some of them ran out.

When the EPA delivery fell through, the environmental group Water Defense, founded by actor Mark Ruffalo, said it would send a tanker from Washingtonville, N.Y., today to replenish the residents' supply.

Dimock has become a focal point in the national debate over the fracking method, which has allowed energy companies to tap previously inaccessible reservoirs of natural gas while raising concerns about its possible health and environmental consequences. The industry says the technique is safe.

Gas drilling companies have flocked in recent years to the Marcellus shale, a rock formation underlying New York, Pennsylvania, Ohio and West Virginia that's believed to hold the nation's largest deposit of natural gas. Pennsylvania has been the center of activity, with thousands of wells drilled in the past few years.

The latest twist in the three-year-old Dimock saga left residents with plenty of questions but no answers.

"What happened? Who had the power here? Who had the power to change their minds? Was it the governor? Was it somebody from Washington? Was it Cabot? What happened? We don't know. We're really confused," said Wendy Seymour, an organic garlic farmer.

Seymour said an EPA official in Philadelphia told her on Friday that she could expect a delivery. The next day, another EPA official called her and "apologized for the confusion" and said the agency was still assessing the situation.

Claire Sandberg, executive director of Water Defense, said the EPA owed them an explanation.

"It's tragic to see the EPA raise these people's hopes and then dash them, to see the EPA suggest they were beginning to accept their responsibility to protect the public, and then back out a few hours later when these people are so desperate," she said.

Associated Press can be reached at or.

NEW YORK TIMES:

January 6, 2012, 5:53 pm

On Shale Gas, Warming and Whiplash

By ANDREW C. REVKIN

Jan. 7, 10:04 p.m. | Updated below |

If you scan back you'll see what's becoming a pretty long series of headlines here dealing with a phenomenon I've noted since 2008 or so — a feeling of whiplash in tracking the flow of climate science and related news coverage. (One example is "On Plankton, Warming and Whiplash.")

Here we go again. This time, the issue is the hydraulic fracturing of shale and similar rock to extract natural gas (and oil, as well). This technique, widely known as fracking, has raised environmental concerns while opening a vast new resource that is reshaping energy menus from the United States to China.

Newly published research led by Cornell University scientists challenges the core calculations and conclusions of a paper by another Cornell researcher, Robert Howarth, that became a potent talking point for opponents of hydraulic fracturing last year. Here's a link to the <u>new paper</u>, which was just published in Climatic Change.

The Howarth paper, "Methane and the greenhouse-gas footprint of natural gas from shale formations," had estimated that leakage of gas from hydraulic fracturing operations (given that natural gas is mainly methane, a potent heat-trapping substance) and other factors made the climate impact of gas from such wells substantially worse than that of coal, measured per unit of energy. The abstract was bluntly worded:

Compared to coal, the [climate] footprint of shale gas is at least 20% greater and perhaps more than twice as great on the 20-year horizon and is comparable when compared over 100 years.

That finding cut against the long-established estimate that the greenhouse impact of natural gas was roughly half that of coal. It is this property of natural gas that long made many climate and energy analysts see a shift

from coal to gas in electricity generation as a big, cheap and quick early step on the long road to curbing global warming. Howarth acknowledged, behind the headlines, that his conclusions were based on limited data. But opponents of hydraulic fracturing spun the study as proving that gas was no "bridge" to a climate-friendly global energy mix. Most news coverage of the Howarth paper played the debate over the findings as a crusading scientist (Howarth is a staunch foe of hydraulic fracturing in the Northeast) being challenged by the gas industry, when there were concerns expressed by other climate researchers at the time.

Last year, <u>Howarth's findings were questioned by researchers</u> at the National Energy Technology Laboratory, as well. The gas industry, focused mainly on the documentary "<u>Gasland</u>," had to open a new <u>Howarth front</u> in its failing public relations campaign.

Howarth's prime conclusion is now directly challenged in the new paper. Here's the keystone line from the abstract:

Using more reasonable leakage rates and bases of comparison, shale gas has a [greenhouse gas] footprint that is half and perhaps a third that of coal.

Setting aside the fights between environmentalists and industry, the picture emerging in the science is of an initial assertion in an area with inadequate data (largely because of the industry's proprietary bent) that is — unsurprisingly — being challenged. I encourage you to look back at Gavin Schmidt's "Fracking Methane" post from last year at Realclimate, which I feel nailed the nuances. I hope he will take a look at the new work, too. Unfortunately, when research on tough questions sits under the microscope because of its relevancy to policy fights, the impact on the public can be a severe case of whiplash. Journalists and campaigners succumbing to "single-study syndrome" in search of a hot front-page headline or debating point threaten to alienate readers seeking some sense of reality.

Here's the abstract from the new paper, by Lawrence M. Cathles, Larry Brown, Milton Taam and Andrew Hunter (GHG stands for greenhouse gas):

Natural gas is widely considered to be an environmentally cleaner fuel than coal because it does not produce detrimental by-products such as sulfur, mercury, ash and particulates and because it provides twice the energy per unit of weight with half the carbon footprint during combustion. These points are not in dispute. However, in their recent publication in Climatic Change Letters, Howarth et al. (2011) report that their life-cycle evaluation of shale gas drilling suggests that shale gas has a larger GHG footprint than coal and that this larger footprint "undercuts the logic of its use as a bridging fuel over the coming decades". We argue here that their analysis is seriously flawed in that they significantly overestimate the fugitive emissions associated with unconventional gas extraction, undervalue the contribution of "green technologies" to reducing those emissions to a level approaching that of conventional gas, base their comparison between gas and coal on heat rather than electricity generation (almost the sole use of coal), and assume a time interval over which to compute the relative climate impact of gas compared to coal that does not capture the contrast between the long residence time of CO2 and the short residence time of methane in the atmosphere. High leakage rates, a short methane GWP, and comparison in terms of heat content are the inappropriate bases upon which Howarth et al. ground their claim that gas could be twice as bad as coal in its greenhouse impact. Using more reasonable leakage rates and bases of comparison, shale gas has a GHG footprint that is half and perhaps a third that of coal. I reached out to Howarth today (when I asked his views on an early version of Cathles et al paper, he'd told me he had prepared a formal reply that was to be published in the journal along with the new work. There was some kind of logistical glitch, he said. In the meantime, the journal editors gave him clearance to offer this short

In April 2011, my colleagues Tony Ingraffea, Renee Santoro, and I published the first comprehensive analysis of greenhouse gas (GHG) emissions from shale gas obtained by hydraulic fracturing, with a focus on methane emissions, in the journal Climatic Change Letters. Our analysis was challenged by Cathles et al. (2012). We were invited by the journal to write a reply, with the understanding that the criticism of Cathles et al. and our reply would be published simultaneously early this year. Unfortunately, a mistake by the publisher apparently resulted in the premature publication of the Cathles et al. piece earlier today. We are still finalizing our reply, but we fully expect to have a reply finished and ready for publication within a few weeks at most, with publication on line following within 1-2 months after that.

reaction for Dot Earth:

We stand by our approach and findings published last April, and find little of merit in the criticisms by Cathles

and colleagues. The latest EPA estimate for methane emissions from shale gas falls within the range of our estimates but not those of Cathles et al, which are substantially lower. Cathles et al. believe the focus should be just on electricity generation, and the global warming potential of methane should be considered only on a 100-year time scale. Our analysis covered both electricity (30% of US usage) and heat generation (the largest usage), and we evaluated both 20- and 100-year integrated time frames for methane. Both time frames are important, but the decadal scale is critical, given the urgent need to avoid climate-system tipping points. We also used the latest available estimates for the global warming potential of methane, while Cathles relied on older and lower values.

Using all available information and the latest climate science, we conclude that for most uses, the GHG footprint of shale gas is greater than that of other fossil fuels on time scales of up to 100 years. When used to generate electricity, the shale-gas footprint is still significantly greater than that of coal at decadal time scales but is less at the century scale. We reiterate our conclusion from our April 2011 paper that shale gas is not a suitable bridge fuel for the 21st Century.

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